# Chapter 1 Purpose of and Need for the Proposed Action

#### 1.1 Introduction

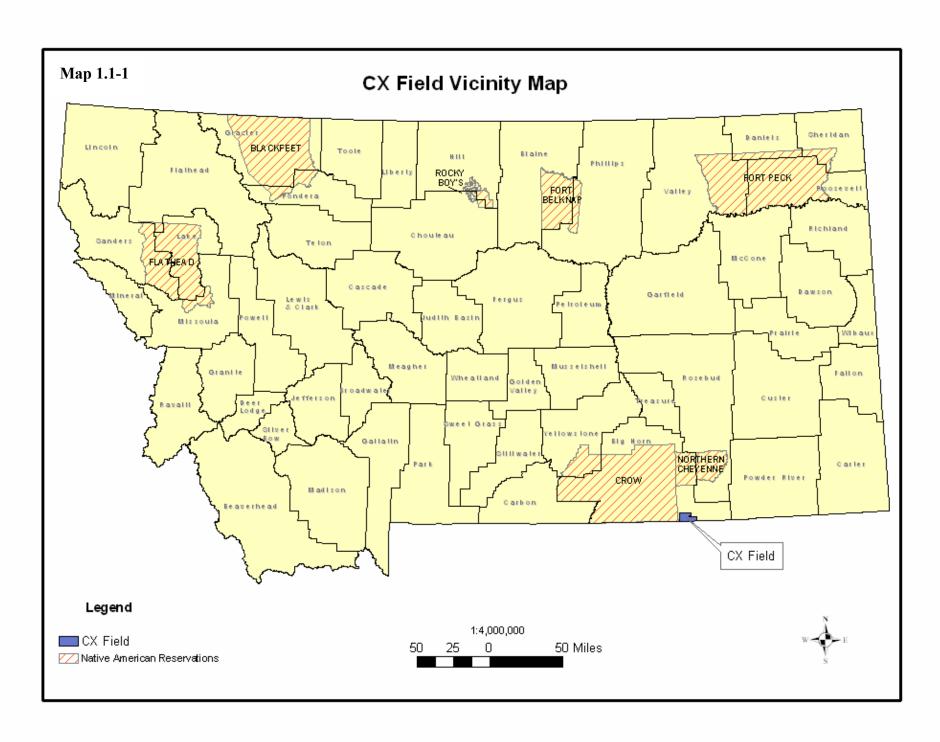
Fidelity Exploration & Production Company (Fidelity) proposes to develop coal bed natural gas (CBNG) in its Tongue River-Badger Hills Project area located in Big Horn County of southeastern Montana (Map 1.1-1). The Project area, located in T. 9 S., R. 40 and 41 E. is part of the CX Field (Map 1.1-2) approved by the Montana Board of Oil & Gas Conservation (MBOGC). The proposed Project includes the drilling, completing and producing of 178 wells, constructing and installing the associated infrastructure of access roads, flowlines, power lines, meter and compressor facilities, produced water impoundments and outfalls and reclaiming disturbed areas (Map 1.1-4). Fidelity proposes to begin these operations after receipt of necessary approvals with completion of these operations in 2005. The average production life of the Project wells is expected to be 10-15 years with final reclamation to be completed two to three years after plugging of the wells. Components of the proposed Project are listed in Chapter 2, Table 2.6-1.

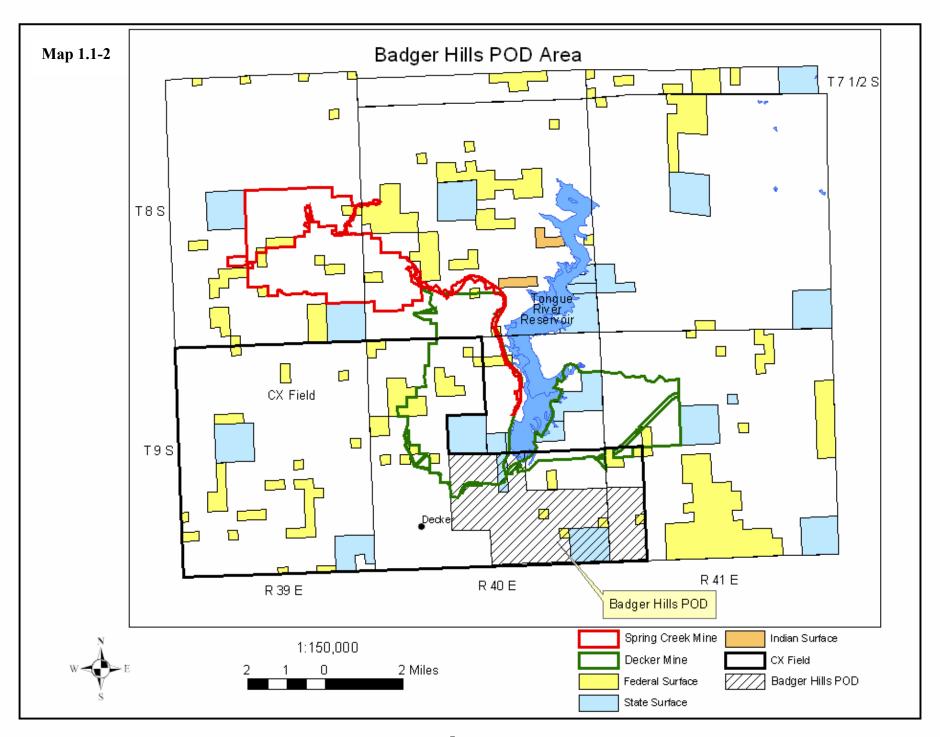
The Proposed Action requiring a decision by BLM includes the drilling, completing and producing of 85 wells, completing and producing 1 previously drilled well and constructing and installing the associated infrastructure serving federal leases within the Project area, as well as reclaiming disturbed areas and plugging federal wells when they are no longer needed. A more detailed description of the Plan of Development and Proposed Action are found in Chapter 2.

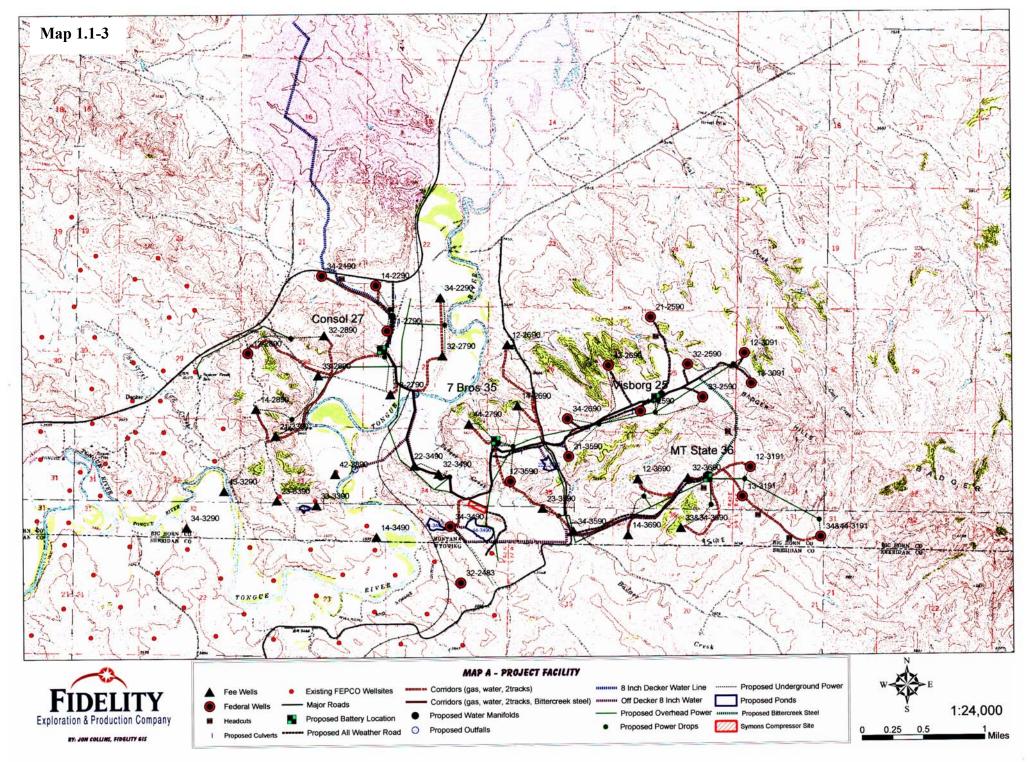
# 1.2 Purpose and Need

The purpose of the Proposed Action is for Fidelity to develop the CBNG resources that may be found in five coal seams on federal leases within the project area. Fidelity's Plan of Development is needed to ensure that CBNG development under its leases occurs in an orderly, efficient and environmentally responsible manner that provides measures to protect the environment and surface owner assets.

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#### 1.3 Other Relevant Environmental Documents

The Proposed Action is in conformance with the terms and the conditions of the *BLM 1984 Powder River Resource Management Plan* (RMP), as amended by the *BLM 1994 Miles City District Oil and Gas EIS/Amendment* and the *Montana Statewide Oil and Gas EIS/Amendment of the Powder River and Billings RMPs* (BLM, 2003).

The Proposed Action is considered under the requirements of the Mineral Leasing Act (MLA), the Federal Land Policy Management Act (FLPMA) and the BLM regulations at 43 CFR 3160 and other applicable laws and regulations. The following environmental documents were used in preparation of this EA and are incorporated by reference:

- Montana Statewide Final Oil and EIS and Amendment of the Powder River and Billings RMPs (MT EIS), April, 2003. This EA is tiered to the MT EIS.
- Final Environmental Impact Statement and Proposed Plan Amendment for the Powder River Basin Oil and Gas Project (WY EIS), April, 2003.
- EA prepared by MBOGC for the Project, August, 2003.
- EA prepared by DNRC for Project wells and infrastructure in Section 36, September, 2003.
- EA prepared by Montana Department of Environmental Quality (MDEQ) for the Symons Compressor Site, May, 2003.
- EAs prepared by DNRC for beneficial use of produced water at the Spring Creek and Decker Coal Mines, December, 2002 and June, 2003 respectively.
- EA prepared by MDEQ for the MPDES permit for discharge of produced water into the Tongue River.

# 1.4 BLM Decisions Required

Decisions to be made by BLM include whether or not to approve the individual components of the proposed action (as presented in Table 2.6-1); whether to modify the proposed action and to identify mitigation measures and monitoring activities that may be necessary in addition to those proposed by the operator. Although included in the environmental analysis to aid in understanding the overall project impacts, no BLM action or decision is required in regard to well construction, completion or production for the 92 private and state wells, or their supporting infrastructure.

#### 1.5 Issue Identification

Relevant major issues were identified through technical staff review of the proposal, from issues already known based on preparation of the MT EIS in 2003, from landowner consultations at the onsite meeting and from concerns raised in the State Director Review requests filed last October. The resulting major relevant issues identified as the focus of analysis in this environmental assessment include the following:

- Surface Water Quality The potential for the discharge of produced water into the Tongue River to meet the water quality standards of the State of Montana or the Northern Cheyenne Tribe.
- Drawdown of the groundwater table How the pumping of water out of coal seams could affect area springs and wells.
- Produced Water Storage Whether the produced water impoundments would be adequately constructed and managed to prevent seepage and impacts to adjacent surface or groundwater.
- Land Application Impacts from land application of produced water on vegetation, soils and alluvial groundwater.

- Wildlife Resources The effects of habitat fragmentation and disturbance on wildlife resources in the project area.
- Air quality The impacts from CBNG development activities such as fugitive dust from construction activities and field operations and emissions from the operation of compressors and compliance with ambient air quality standards and prevention of significant deterioration (PSD) values.
- Cultural Resources The potential effect on historic properties and areas of traditional cultural value to Native Americans.
- Social and Economic Impacts Impacts to private surface owners from noise associated with development, potential affects on surface owner resources and potential environmental justice issues.
- Cumulative Impacts Understanding the potential for cumulative impacts from past, present and reasonably foreseeable future actions that might occur in combination with the proposed action.

# 1.6 Federal, State and Local Permits; or Required Consultations

#### Air Quality Permits

The sales battery (i.e., Symons Central Compressor Station), includes sources with high enough emissions to trigger MDEQ air quality permit requirements under the Administrative Rules of Montana (ARM 17.8.743). Permit #3250-00 was finalized on July 16, 2003. The permitting process included a review and determination of best available control technology (BACT) and conditions to control emissions of particulate matter from roads, parking lots and unpaved portions of haul roads, access roads, parking lots, and the general plant area. Although a PSD increment analysis was not required by the ARM, due to the high projected development of CBNG in Montana, the MDEQ determined that CBNG compressor stations must meet PSD increments for NO<sub>X</sub>. Therefore, a Class I/Class II increment analysis was conducted.

The MDEQ is also in the process of reviewing Air Quality Permit Applications for four additional batteries included in the Project area (Seven Brothers 35, Visborg 25, MT State 36 and Consol 27 Batteries). Emissions from these sources are considered in the air quality section of this EA.

## Federal Section 404 Permits

Construction and operation of the additional 2 proposed outfalls into the Tongue River require review and approval under Section 404 of the Clean Water Act by the U.S. Army Corps of Engineers. Fidelity has received an approved permit for Outfall 015 and Outfall 016.

## Montana 310 Permit

Construction and operation of the additional 2 proposed outfalls into the Tongue River require review and approval by the Big Horn County Conservation District under the Administrative Rules of Montana (ARM 75-5-310). Fidelity has received an approved permit for Outfall 015 and Outfall 016.

## Storm Water Discharge Permit

MDEQ authorizes construction activities that may impact State Waters under the General Permit for Storm Water Discharges Associated Construction Activity Permit (MTR 100000). Fidelity has received approved permits for construction of the battery sites and the water pipe line to the Decker Coal Mine.

# Montana Pollutant Discharge Elimination System Permit (MPDES permit)

The MDEQ approved MPDES permit (MT-0030457) which allows the discharge into the Tongue River of up to 1600 gallons per minute of untreated water produced with CBNG in the CX Field.

#### Beneficial Use Permits

Fidelity received approved permits for beneficial use of the produced water from DNRC Water Rights Bureau. The permits authorize the use of water produced by Fidelity to be used at the Decker and Spring Creek coal mines.

#### Federal 401 Discharge Certification

MDEQ reviews, and can approve, condition or deny federal permits that might result in a discharge to state or tribal waters, including wetlands. MDEQ decisions are designed to ensure compliance with state and tribal water quality standards. Fidelity received a waiver of 401 certification from the MDEQ on August 28, 2003.

#### MBOGC Earthen Pit or Pond Permit

MBOGC approved permits for the construction and operation of 3 reservoirs designed to store water produced in association with the production of CBNG from wells in the Project area. The total containment reservoirs would be located out of drainages on private surface. The three reservoirs would be partially or entirely located on lands overlying federal minerals. Because water from federal wells is proposed to be stored in these reservoirs, BLM approval is required in accordance with Federal Onshore Oil and Gas Order No. 7. The water would be stored in the reservoirs during the non-irrigation season and used for irrigating during the irrigation season.

## **DNRC Dam Permit**

Applications for Hazard Classification for the 3 reservoirs were submitted to DNRC. The review completed by DNRC assigned a low hazard classification to each reservoir. No further DNRC review and consent is needed for design, construction and operation of low hazard reservoirs.

#### MDEQ Sand & Gravel Permit

MDEQ approved a permit (FEP-001) that allows for the construction and operation of a gravel quarry.

#### Surface Use Agreement

The operator must certify that an agreement with a private surface owner exists or, in lieu of an agreement, that the requirements of Federal Oil and Gas Onshore Order No. 1 have been met. BLM will not consider the APD complete until the requirements have been met. Fidelity has written agreements with private surface owners.

#### Water Well Mitigation

MBOGC Order 99-99 requires CBNG operators to offer water mitigation agreements to owners of water wells or natural springs within one-half mile of a CBNG field or within the area that the operator reasonable believes may be impacted by a CBNG production operation. Fidelity has written agreements with potentially affected water well or spring owners.

#### **SHPO** Consultation

The SHPO participated in the preparation of the MT EIS. Members of SHPO and specifically Stan Wilmoth, reviewed both the draft and final EISs. Comments were provided to BLM on the draft EIS.

BLM consulted with the Montana SHPO for the cultural resource inventories completed in 2003 for the proposed action. Consultation was conducted in September 2003 under the Case-by-Case Provision of the Montana State Protocol implementing BLM's National Programmatic Agreement for Cultural Resources. A portion of this provision deals with "Highly Controversial Undertakings" which is defined as those undertakings that have received a high level of media attention. A small portion of the main 2003 inventory intruded onto the state section. No cultural resources were located in the inventoried area (BLM Report MT-072 and 072a).

The SHPO concurred on September 16, 2003, with BLM's determination that there were no historic properties affected by the proposed undertaking being permitted as part of the Federal action. The SHPO note states "No properties listed on or eligible for NRHP appear likely to exist within project impact areas".

The State of Montana conducted a cultural resource inventory on state lands in the project area. The state is responsible for consulting with the Montana SHPO over projects on their lands.

#### **Tribal Consultation**

During preparation of the MT EIS in 2002 and 2003, BLM consulted on a programmatic basis with the Northern Cheyenne, Lower Brule Sioux and Crow Tribes regarding traditional cultural resource values in the Powder River Basin. BLM prepared an "Ethnographic Overview for Southeast Montana" (Peterson and Deaver 2002) with information provided by the Crow and Northern Cheyenne Tribes. In addition, both the Crow and Northern Cheyenne Tribes prepared narrative reports describing culturally sensitive site types and resources. The reports were incorporated by reference in the MT EIS. The report and narratives can be found on the BLM, Miles City Field Office website at <a href="www.mt.blm.gov/mcfo">www.mt.blm.gov/mcfo</a>.

Based on the results of the consultation and reports, BLM directed contractors conducting the inventory of the Badger Hills Project to pay particular attention to traditional cultural concerns such as springs, homesteads and plant communities.

On November 5, 2003, the Northern Cheyenne tribal historic preservation officer was provided copies of all the 2003 cultural resource reports for CBNG projects, including the Fidelity POD. Those reports did not identify any traditional cultural sites in the project area like those that had been identified as a concern in the MT EIS. Because no comments were received on these reports, the BLM sent a follow-up letter to the Northern Cheyenne Tribe, which they received on December 17, 2003, requesting them to notify BLM within 30 days if they had cultural resource concerns about the proposed POD. As of February 06, 2004, no formal written response to BLM's December 16<sup>th</sup> letter has been received from the Northern Cheyenne Tribe.

BLM sent copies of the APD's and maps for the project to Ms. Gail Small of Native Action, who received them on June 27, 2003. Native Action did not provide a response to the BLM regarding cultural resource issues about the proposed project prior to the initial approval on September 16, 2003.

#### **FWS** Consultation

BLM is required to conduct Section 7 Consultation under the Endangered Species Act (50 CFR, Part 402.14) with US Fish and Wildlife Service (FWS) regarding the proposed action. A Biological Assessment of impacts to Threatened/Endangered (T/E) species was provided to FWS by BLM (letter to FWS dated 1/7/04, BLM files). FWS provided a Biological Opinion and Concurrence dated February 2, 2004, addressing the BLM Biological Assessment with recommendations for protection/mitigation to T/E species.